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09/990,037	11/20/2001	Andrea C. Keenan	A01078	1493

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EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/990,037

**Applicant(s)**

KEENAN ET AL.

**Examiner**

Lakshmi S Channavajjala

**Art Unit**

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3                      6) ☐ Other: \_\_\_\_

Art Unit: 1615

### DETAILED ACTION

Receipt of Information Disclosure Statements dated 3-1-02 and 4-29-02 is acknowledged.

Claims 1-24 are pending.

Instant claims are directed to an oil-absorbing composition and a process of preparing a comprising an aqueous emulsion polymer having low amounts of an ionic monomer and high amounts of hydrophobic monomers, and optionally a cross-linking agent, the oil-absorbing composition absorbing at least 20% of at least one oily substance or at least one hydrophobic material in a heterogenous medium, based on the total weight of the polymer composition.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,880,842 to Kowalski et al (hereafter Kowalski).

Kowalski discloses multi-stage emulsion polymerization of a low-acid polymer comprising emulsion polymerization of an ethylenically unsaturated monomer and less than 5% by weight of a monomer containing acid-functionality. Among the ethylenically unsaturated monomers Kowalski teaches the instant esters of methacrylic acid (col. 3, lines 5-61). In particular, in example II (col. 8) Kowalski discloses a mixture of 46 g. of butylmethacrylate, 66.7 g. of methylmethacrylate (which read on the hydrophobic

Art Unit: 1615

monomers of instant claims) and 2.3 g. of methacrylic acid (instant ionic monomer). The percentages of monomers taught in the example are within the claimed percentages.

Accordingly, it is examiner's position that the molecular weights of the monomers are also within the claimed range. While Kowlaski does not specifically state the oil-absorbing capacity of the composition, instant claims recite the limitation as an intended use and hence carry no patentable weight. Kowalski also disclose cross-linking agents such as divinylbenzene, ethylene glycol etc (col. 3, lines 61-68). Therefore, Kowalski anticipates instant claims.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1615

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,940,578 to Yoshihara et al (hereafter Yoshihara).

Yoshihara teaches a hair preparation comprising oil-absorptive polymer of a vinyl monomer, for absorbing excess sebum from hair and scalp. The polymer of Yoshihara is made of monomers such as esters of acrylic acid or methacrylic acid with 8 to 24 carbon atoms or acrylic acid, such as methacrylic acid, methacrylic acid (col. 4, lines 1-30), either used alone or in combination. Yoshihara teaches cross-linking of polymer using cross-linkers such as divinylbenzene, ethylene glycol etc (col. 4, lines 43-60). Yoshihara teaches particles of polymers (read on claim 7) and teach using the composition for absorbing sebum, an oily substance o hair. Accordingly, Yoshihara meet the limitations of composition claims 6-8 and the instant process claims that recite the limitations of claims 6-8. Yoshihara further teaches stabilizers such as surfactants that stabilize the polymer (col. 5, lines 19-26) and thus meet the instant limitation of complexation agent (claim 17).

Yoshihara differs from the instant claims in the teaching of the percentages of ionic monomer, percentages of hydrophobic monomer and the teaching of terpolymer. However, Yoshida teaches that the monomers can be used alone or in combinations and that the monomers should have a solubility parameter of 7 to 10 and glass transition temperature (Tg) of 100 degrees C or higher. Therefore, it would have been within the scope of a skilled artisan at the time of the instant invention to use a homopolymers of esters of methacrylic acid or copolymer of methacrylate esters and methacrylic or acrylic acid and still expect the polymer to have oil-absorbing properties as long as the polymer

Art Unit: 1615

has the solubility parameters and the Tg in the above range because Yoshihara teaches that the above parameters are important in imparting the sebum absorptivity to the polymer and outside the solubility range the compatibility of the product with sebum is poor. Accordingly, it would have been obvious for one of an ordinary skill in the art to choose a copolymer of desired monomer units from the monomers of Kowalski and use it for absorbing sebum on the hair and scalp. Kowalski teaches the same monomers as instant claims and accordingly absent showing evidence to the contrary, the oil-absorbing process employing the polymer of Kowalski is reversible.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being obvious over US 6,040,409 to Lau et al (Lau).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this

Art Unit: 1615

rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Lau teaches polymer compositions comprising a) 9.5 to 100 parts by weight of at least one C16 to C40 alkyl ester of methacrylic acid, b) 0-90 parts by weight of at least one ethylenically unsaturated acid and c) 0 to 60 parts by weight of at least one alkali soluble resin (col. 2, lines 10-67, col. 218) Lau also teaches adding low levels of monomers such as methacrylic acid, acrylic acid, itaconic acid etc (col. 3, lines 57-63) and cross-linking agent (col. 4, lines 3-9). In particular, in example 1 Lau teaches the monomers MAA, MMA, LMA and BA, the amounts of which are in the claimed range. Lau teaches the compositions as wax replacements for wood floors. Further, Lau teaches incorporating the polymers in floor polish compositions containing water and surfactants and other components. Lau does not state that the compositions are oil absorbing. However, the composition of Lau contains the polymers made of same monomers that are claimed and disclosed in the instant invention and in similar percentage ranges. Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the composition of Lau for polishing wooden floors and that incorporating the polymers of Lau in the floor polishes replaces the wax of the wooden floors and renders the floors more smooth. And reduce the slipperiness cause by wax in the wooden floor polish material.

Art Unit: 1615

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,040,409.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are directed to an emulsion polymer containing 9.5 to 100 parts of ester of methacrylic acid, 0 to 90 parts of an ethylenically unsaturated acid, which read on the instant hydrophobic and ionic monomers respectively. The composition of Lau is used for replacing wax in wooden floor polish compositions and instant claims include wooden substrates on which the composition is used. Thus, the patented claims are in the same scope as that of the instant claims.

***Claim Rejections - 35 USC § 112***

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.



Art Unit: 1615

Instant claim recites terpolymers, where the variables A, B and C are defined. The variables S, T, m, n, p, R have been defined in the instant specification, but not the variables R' and R''. It is unclear as to what the above variables stand for and accordingly, the meets and bounds of the instant claim are not defined. For examination purpose examiner considers all the variables i.e., R, R' and R'' represent H, CH<sub>3</sub> or an alkyl group (as recited in the specification).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala  
Examiner  
Art Unit 1615  
June 17, 2003